

DATA VERIFICATION AND VALIDATION

During FY 1999, VA continued to make progress toward addressing both the data verification methods used by our three major organizations (VHA, VBA, and NCA) as well as data limitations. The Office of the Actuary and the cooperative relationship with the IG are contributing factors to the progress we made. In addition to the Department's overall progress, our three major organizations have worked to improve their internal controls on data collection which, in turn, has improved their data reliability, validity, and integrity.

VHA

The validity of VHA's electronic databases has been assessed in a number of studies by researchers, with adequate validity being found for most data elements. For those measures where data are collected as a result of patient chart review, medical record reviews have been performed with computerized algorithms to enhance data reliability. In addition, abstractors have received intensive training in the application of the relevant criteria prior to abstraction, and a help desk is available to them to answer questions about difficult charts. Inter-rater reliability has been assessed with the level of agreement being at least adequate for all performance measures, when compared to generally accepted standards.

Extensive psychometric testing of the customer feedback instruments has been performed to establish their reliability and validity. In addition, validity has been enhanced by risk-adjusting facility data for age, gender, and health status, and by using a wide variety of survey procedures to obtain high response rates. The validity of the self-reported measures has been considerably enhanced through on-site visits for randomly selected facilities.

Internal controls exist for many of VHA's data collection efforts. However, the quality of the data is receiving greater scrutiny. In response to criticisms, VHA made progress toward developing a data quality strategy to provide

the necessary internal control processes that have been lacking in the system with regard to data validity, reliability, and integrity. In response to a GAO-issued report, the Under Secretary for Health requested that VHA hold a Data Validation Summit to develop strategies that will help eliminate such problems as lack of standard definitions, decentralized approaches to data collection and implementation of automated systems, local modification, lack of knowledge/understanding, and difficulty of coordination of more than 140 VHA databases contributing to data validity problems.

VHA's Data Quality Journey project began in January 1999 following the December 1998 Data Quality Summit. As a result of the summit, five field-based workgroups were formed to address data quality at VHA. The groups were charged with: forming a data quality advisory group; recommending processes for data standardization; addressing local accountabilities for data quality; recommending mechanisms for employee education, training, and communication of data quality efforts; and assessing patient needs for access to health information. Each group worked on the three or four high-priority action items identified at the summit, completing the task in September 1999. Workgroup accomplishments to date include, but are not limited to: developing a memorandum describing the structure, membership and responsibilities of a data quality advisory group, the Data Quality Council; establishing a working cooperative with the Data Consortium; developing a questionnaire to assess veterans' needs for access to their health information and general health information; surveying clinical managers at a VAMC on current health summaries and patient access methods in order to assess what is used by the field; and reviewing the VA Information Resource Center roadmap of VA data sources documentation.

In July 1999, workgroup progress reviews and discussions of future directions for data quality improvement efforts resulted in a major focus on ways to improve the quality of ambulatory care data. Recommendations included: improvement and standardization of workload information; improvement of outpatient documentation for coding; development of a standard validation program; and development of an implementation plan for policies and standards for compliance planning.

VBA

C&P's data in the VBA Benefits Delivery Network was vulnerable to reporting errors and to the erroneous entering of data to show better performance than was actually achieved. VBA took several steps to ensure it has accurate and reliable data for planning and management purposes. VBA has been collecting and storing in a database all end product transactions from all stations since October 1, 1997. From that database, VBA extracts and reviews transactions, and identifies questionable actions for the following types of claims: original and reopened compensation, original and reopened disability pension, original dependency and indemnity compensation, and original death pension.

On a weekly basis, data are extracted and records of questionable transactions within and among regional offices are made available via the Intranet. C&P tracks the questionable transactions for each office and prepares quarterly summaries which are also available to local field managers via the Intranet.

The C&P Service also tracks the percent of questionable end product transactions for each office. For those stations having the highest percentage of questionable transactions, case call-in reviews were conducted. Approximately 500 cases, from five selected regional offices, were reviewed during April 1999. Based on the results of this review, the Office of Field Operations and the C&P

Service management met with the regional office directors and staff representatives in June 1999 to discuss the findings. Each office was required to submit an action plan for addressing end product improprieties.

NCA

NCA workload data are collected monthly through field station input to the Management and Decision Support System, the Burial Operations Support System (BOSS), and the Automated Monument Application System-Redesign. Headquarters staff review the data for general conformance with previous report periods, and any irregularities are validated through contact with the reporting station.

NCA conducts an annual survey of the families of individuals who are interred in national cemeteries and of other visitors to measure how the public perceives the appearance of the cemeteries and the quality of service provided. VA headquarters staff oversee the survey process and provide an annual report at the national level. NCA Area Office and cemetery level reports are provided for NCA management use.

Efforts are also underway to expand the use of information technology to collect performance data for recently developed performance measures. In FY 1999, NCA established a Data Validation Team, with members from headquarters and the field, to ensure performance data collected and reported for timeliness of scheduling interments and setting headstones and markers are accurate, valid, and verifiable. The team's major tasks include defining performance measurement terms to ensure standard interpretation and application throughout NCA; identifying training needs to ensure accuracy of data and consistent data entry processes; and recommending necessary changes to BOSS to help ensure accurate data are entered.

Data Validity and the Chief Actuary

In its December 1996 report, the Veterans Claims Adjudication Commission observed many critical decisions relative to VA programs were not supported by valid data and long-term analyses of program needs. To this end, the Commission recommended, and the Secretary of Veterans Affairs agreed, VA should establish a capacity for actuarial analysis at the Department level. In establishing the position of Chief Actuary, the Department acknowledged actuarial analysis will significantly benefit the evaluation of the long-term financial commitment of VA programs to individual veterans and their dependents. Further, VA expects this function to influence such other areas as the demographics of beneficiaries, disability rates, lifetime utilization of VA programs, and projections of future beneficiaries and VA workload. In July 1999, VA recruited its first Chief Actuary.

To effectively serve VA and its beneficiaries, the Chief Actuary will need to ensure he is positively impacting the validity and accuracy of VA data. As his role evolves, VA anticipates improvements will ultimately result from the Chief Actuary's efforts to create new data sets and improve old ones. Most immediately, the Chief Actuary, supported by HayGroup, a nationally-recognized actuarial firm, is implementing significant enhancements to the national estimates of the number and characteristics of veterans. Additionally, as a heavy user of many of VA's administrative data sets, the Chief Actuary will explore relationships between the data elements, and ask questions that may not have been contemplated when the data set was created. In this process, data are validated. The Chief Actuary is available to provide actuarial assistance to data developers throughout the Department and will also research exogenous data for useful information.

As a profession, actuaries apply Actuarial Standards of Practice to their work. According to Actuarial Standard of Practice No. 23,

"Data Quality," data should be reviewed for reasonableness and consistency, any actual or potential material biases should be disclosed, and documentation to support the use of specific data should be maintained. Consequently, VA expects the results of an actuarial review will be valuable feedback to data developers to help them improve the validity and accuracy of their data.

IG Performance Audits

The IG continued its assessment to validate the accuracy and reliability of VA's key performance measures in accordance with the Government Performance and Results Act. During FY 1999, the IG assessed the accuracy of data used to count the number of unique patients, and the accuracy of data used to measure the percent of veterans served by a burial option.

The IG assessment of data on the number of unique patients determined that more accurate figures are needed. The IG found that the three million unique patients reported for FY 1997 was overstated by 5.7 percent. The overstatement occurred because: (1) inaccurate social security numbers were input into the National Patient Care Database, and (2) patients with undocumented outpatient appointments, and appointment cancellations and no-shows were sometimes counted as patients treated.

To correct the overstatement, the IG recommended the Under Secretary for Health establish an edit check at the Austin Automation Center to identify and correct input errors, establish an edit check to identify pseudo social security numbers, and make corrections if necessary. The Acting Under Secretary for Health agreed with the recommendations and provided acceptable implementation plans.

The other IG performance audit completed during FY 1999 assessed the accuracy of data used to measure the percent of the veteran population served by a burial option within a reasonable distance of place of residence.

Audit results showed NCA personnel generally made sound decisions and accurate calculations when preparing their estimate. However, the Office of Planning and Analysis personnel could not recreate the veteran population projections used to calculate NCA's estimate because certain essential data were no longer available. The lack of this data impaired the scope of the audit and, as a result, the IG could not verify the accuracy of the population projections or the NCA estimate based on the projections. The IG recommended the Office of Planning and Analysis retain sufficient documentation to recreate future veteran population projections.

The Assistant Secretary for Planning and Analysis agreed with the IG recommendations and provided acceptable implementation plans. NCA provided comments that indicated corrective action would be taken for the concerns noted in the management advisory section of the report. The IG considers the recommendations resolved.